# Conceptual Park & Open Space Proposal:

# A Guide to the Planning Process



Prepared by the City of Fitchburg Parks, Recreation & Forestry Department

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We would like to give credit and thanks to the following people for their support and contributions to the project:

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Tom Hovel
Jason Schmidt
Planning & Zoning Department

Phil Lewis
Professor Phil Lewis' Regional Design Academy

City of Fitchburg Parks Commission

City of Fitchburg Plan Commission

City of Fitchburg Common Council

City of Fitchburg Staff

Dane County Staff

Bureau of Endangered Resources Wisconsin Department of Natural Resources

Residents of Fitchburg



### **Executive Summary**

Beginning in 2007, the Conceptual Park & Open Space Proposal was developed as a comprehensive study of Fitchburg's natural and cultural resources. Ed Bartell, City Forester/Naturalist, and Dana Dentice, Landscape Architect Intern, have spearheaded the project. Other City staff has also made significant contributions. The Parks, Recreation & Forestry Department and the Planning Department have coordinated their efforts as this proposal and the Comprehensive Plan have both undergone drafting at the same time.

This proposal serves as only a *recommendation* of areas to be considered for future parks/recreation facilities and protected open space. It is not necessarily the City's plan for acquisition of private land for public use. Some designated areas in the proposal could be protected through private ownership. This plan is not a land grab.

### **Concept and Goals**

After reviewing a 2005 park and open space concept, the Parks, Recreation & Forestry Department decided to expand it and draft a new proposal using a more comprehensive and resource-based planning model.

The goal of the initial concept, proposed by Tom Hovel (City Planner) and Jim Christoph (former Director of Parks, Recreation & Forestry), was to design a system of linked parks and open space that protect Fitchburg's natural areas and create a buffer between current and future development. The main feature of their conceptual proposal was the creation of a greenbelt buffer (Moraine Edge Park) at the southern boundary of the current urban service area that could showcase Fitchburg's agricultural history. Hovel and Christoph also wanted to link this greenbelt to environmentally sensitive corridors and other significant natural features through park and open space.

The primary goals of the current Park & Open Space Proposal are to:

- Identify all areas outside the urban service area that have environmental and cultural significance and should be considered for preservation
- Make the public aware of these resources and their value
- Guide responsible urban growth and park/recreation planning decisions

The rich variety of environmental and cultural resources in Fitchburg accounts for a significant amount of land that is worth protecting or using for recreation purposes. Therefore, areas of higher priority for both acquisition and future development consideration were designated in the plan as follows:

- Areas most feasible for expansion of the City's recreational facilities will receive higher priority in terms of land acquisition and park planning efforts.
- Future urban growth areas, especially those of near term development, will become a priority in terms of further study and documentation of resources and integration of the Park & Open Space Proposal.

The Parks Commission has strongly endorsed the Proposal and its concept and goals and has contributed through their recommendation of three priorities:

- The greenbelt, deemed Moraine Edge Park & Preserve, running along the southern urban service area boundaries (While specific plans have not been established, this land has potential for a diverse array of recreational and educational opportunities.)
- The west and south expansion of McGaw Park (for additional active recreation facilities)
- The Northeast Neighborhood (furthest along in the development planning process)

Fitchburg has the potential to be a permanently green and sustainable community -- a model for other communities. We can achieve this by being proactive in protecting existing resources that our community values, therefore, enhancing the quality of life for generations to come

### Methodology

As stated previously, the Conceptual Park & Open Space Proposal was drafted using a resource-based model. In other words, all available natural and cultural resources data was collected and mapped to determine areas most sensitive to development. This includes the following resources:

### **Environmental Resources**

- Forest resources
- Steep slopes & moraines
- Wetlands
- Water resources
- Hydric soils
- Public land
- Dane County environmental corridors
- Groundwater recharge
- Prime farmland
- Endangered/rare species and significant natural features and plant communities

### Cultural/Historical Resources

- Indian trails, camps, mounds
- Historic buildings/sites
- Historic mines/quarries
- Territorial roads and lead trails
- Scenic resources
- Railroad corridors

The boundaries of the proposed park and open space were drafted based on a composite of these resources and the following criteria:

- Exclusion of
  - o Urban service area
  - Most private structures
- Inclusion of
  - o Hovel and Christoph's greenbelt (formerly Moraine Edge Park)
  - o Most water features, wetlands, and their 300-ft buffers
  - Most woodlands
  - o County, State, and Federal public lands
  - o All Dane County environmental corridors
  - o Areas with multiple resources
  - o Areas with a single resource that link and/or lie adjacent to areas that meet the above criteria
  - O Non-resource areas (to provide wildlife, plant, and recreational corridors)

### **Land Acquisition Mechanisms**

There are numerous mechanisms and financial resources for acquiring parkland and preserving open space. Public lands could be acquired through park dedication, donations, and purchase of title from willing landowners. Potential mechanisms for protecting private open space include conservation easements, the purchase/transfer of development rights, and government regulation (comprehensive plan policy and State law). In addition to City funds and park dedication fees, there are State and County grants available to fund this type of project.

# **Illustration and Map Reference List**

Use this list to refer to illustrations and maps discussed in this document.

Map or Illustration	Page
Initial Concept Illustrations Fitchburg Moraine Open Space & Preservation Areas Park Concept: The Progression of Farming in Fitchburg Timeline	12 13
Park Elements Concept	14
Environmental Resources	1.7
Vegetation (Forest Resources)	15
Steep topography	16
Wetlands	17 18
Hydric soils	19
Water Resources	20
Public land	21
Dane County Environmental Corridors	22
Groundwater Recharge	23
Soil Productivity	24
Natural Heritage Inventory	24
Cultural/Historical Resources	25
Cultural Resources Map	25 26
Scenic Resource	20
Proposal Maps	27
Recommended Boundaries	27 28
Recommended Roundaries and Priorities	20

### **Conceptual Park & Open Space Proposal**

The purpose of this document is to provide all interested parties with background information on the planning process used to draft the Conceptual Park & Open Space Proposal. The proposal was developed by the Parks, Recreation & Forestry Department staff to determine the areas most sensitive to future development that should be considered for protection for both short-term and long-term park and open space planning.

### **Initial Concept**

Developed by Tom Hovel, City Planner and Jim Christoph, former Director of Parks, Recreation and Forestry, the goal of this plan was to create a greenbelt at the southern boundary of the current urban service area. This was intended to provide a buffer between current and future development. This greenbelt, approximately 950 acres, in addition to other significant parcels of land, created a system of linked parks and open space that would further protect and enhance the natural areas of Fitchburg for future generations.

One of the themes of the original plan focused on agriculture in Fitchburg, from an historical perspective. Its focus was to demonstrate a progression of farming technology from the time of the first settlers to the current biotechnology industry. It accounted for a corridor that extended southeast from Stoner Prairie to Irish Lane, then east to the Swan Creek plat.

The original plan also considered the importance of significant geologic, environmental, and historical attributes, but more research regarding those and other characteristics was necessary to develop a thorough, resource-based planning model.

### **Project Goals**

- 1. Identify all areas outside the urban service area that have environmental and cultural significance and should be considered for preservation
- 2. Make the public aware of these resources and their value
- 3. Guide responsible urban growth and park/recreation planning decisions

By protecting its natural resources, Fitchburg can maintain wildlife corridors, protect groundwater recharge areas and sensitive environmental sites, avoid the development of high risk contamination areas, and preserve important historical and cultural features of the city.

### Methodology: Resource-Based Planning Model

All available environmental and cultural resources data was collected and mapped to determine the areas most sensitive to development. Each of the following resources has a map associated with it that defines its coverage (refer to page 4). The following section discusses the significance and/or definition of each resource and the criteria for drafting the Park & Open Space Proposal.

### **Environmental Resources**

### Vegetation (Forest Resources)

Mapped vegetation data is limited to forest resources and includes woodlots and heritage oak trees. The woodlots are delineated based on the most recent air photos. They do not include thin tree lines that

separate agricultural fields or low density tree groupings. The heritage oak inventory is based on the original 1976 inventory done by Walter Scott, who located oak trees estimated to be at least 200 years old within an 8-mile radius from the Capitol. Conditions of the trees are unknown at this time. There are likely to be more trees that fit the age criteria, but they cannot be surveyed without landowner knowledge and consent.

### Benefits of Forest Resources

- Economic value
- Energy conservation
- Air quality
- Water pollutant reduction
- Increased property value
- Timber products

### Steep Topography

Steep slopes are those with a slope of 12% and greater. These slopes are significant as they are used as criteria by the Dane County Regional Planning Commission (DCRPC) and other commissions to define environmental corridors. Steep wooded slopes minimize erosion and provide wildlife habitat (Community Analysis and Planning Division, 1997). Building on steep slopes can be problematic and costly, especially near water resources. Fitchburg also hosts numerous glacial moraines.

### Wetlands

Wetlands serve as "habitat for more species of plants and animals than any other type of landscape". They also store water to prevent flooding and protect water quality. Wisconsin only has about half of the 10 million acres of wetland that were present in 1848 (WDNR, 2008).

The proposal includes a 300-foot wetland buffer, the setback distance that will be established in the Comprehensive Plan. It also incorporates 300-foot buffers for all streams/waterways. "The [Army] Corps of Engineers recommends a minimum riparian buffer width of 300 ft. for avian populations and points out that the wider the buffer, the more protective of ecological functions" (Delaware River Keeper, 2006).

### Water Resources

These include intermittent and perennial streams, lakes, ponds, and drainageways, and springs. These resources are critical to the survival of many species. Over 70% of terrestrial animals use riparian corridors. These corridors "afford wildlife relatively safe access to adjacent resources and serve as travel lanes for species dispersal and migration in our increasingly fragmented landscape" (Isaacson, 1999).

### **Hydric Soils**

Hydric soils play a major role in the identification of wetlands. Areas that meet hydric soil criteria, as well as hydrophytic vegetation and wetland hydrology criteria, are classified as wetlands. According to the Natural Resources Conservation Service (2008), a hydric soil is one "that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part...Soils in which the hydrology has been artificially modified is hydric if the soil, in an unaltered state, was hydric." Possible hydric inclusions, which are non-hydric soil map units but likely to contain hydric inclusions, are also included in the analysis.

### **Public Lands**

Public land includes all parcels of land owned by a governmental body. This includes City, County, State, and Federal property. Public land may be used for park and open space or have facilities that provide services for residents (i.e. police/fire stations, wells). Some properties may have limited public access. Existing and proposed recreational trails are also included in the Proposal. One proposed recreational trail is the conceptual Heritage Circle Route that connects the two railroad corridors through County Highway M.

### **Dane County Environmental Corridors**

Generally speaking, "environmental corridors encompass linear landscape features containing concentrations of natural and cultural resource amenities." Phil Lewis, Jr., UW-Madison professor emeritus, brought attention to the term starting in the 1960s. The planning community has expanded its definition to meet government requirements (Murrell, 2003). Dane County Department of Planning and Development (1997) defines environmental corridors as "continuous systems of open space in urban and urbanizing areas, that include environmentally sensitive lands and natural resources requiring protection from disturbance and development, and lands needed for open space and recreational use."

According to Murrell (2003), DCRPC has mapped environmental corridors for Dane County, including Fitchburg. They are delineated based on available information and the following criteria:

- 1. All waterways and water bodies, including lakes, ponds, intermittent and perennial streams, and drainage ways.
- 2. Vegetated buffer strips along drainage ways, streams, lakes, and wetlands.
- 3. 100-year floodplains.
- 4. Mapped wetlands (taken from the DNR's Wisconsin Wetland Inventory).
- 5. Steep slopes (those 12% or greater).
- 6. Woodlands.
- 7. Existing and proposed parks, greenways, conservancy areas, and storm water management areas.
- 8. Areas of unique vegetation or geology.

### Groundwater Recharge

All of Dane County's drinking water comes from groundwater which originates as recharge. Municipal water use causes significant lowering of water levels. This in turn influences lake and surface water levels (Bradbury, 2006). Some soils have a greater potential for groundwater recharge while impervious surfaces have no opportunity for recharge. Based on data that shows the top 25% of natural infiltration opportunities, there are significant opportunities for groundwater recharge in the City of Fitchburg.

### Soil Productivity (Prime Farmland)

Agriculture is a major land use in Fitchburg and this is beneficial for protecting our food source and maintaining Fitchburg's rural character. Many government agencies, both national and local, recognize the importance of farmland protection and in turn, have drafted related policy. According to data that rates the best soils for agriculture (agricultural groups 1 and 2 of 8), the majority of rural Fitchburg is very suitable for farming.

### Natural Heritage Inventory

Wisconsin's Natural Heritage Inventory program is run by the Wisconsin Department of Natural Resources (WDNR). "NHI programs focus on locating and documenting occurrences of rare species and natural communities, including state and federal endangered and threatened species." Because NHI data are exempt from Wisconsin's Open Records Law due to the vulnerability of rare species to collection and destruction, their locations are generalized for public use (WDNR, 2005).

There are 18 NHI plant and natural community occurrences recorded for Fitchburg. The dates of last observation range from 1880 to 1999. Natural communities include the following: shrub-carr, southern sedge meadow, emergent marsh, shallow lake, warm stream, and wet mesic prairie. Plant occurrences include prairie false-dandelion, Wilcox panic grass, Hall's bulrush, Engelmann spike-rush, Adder's tongue, pale-purple coneflower, Flodman thistle, prairie white-fringed orchid, yellow giant hyssop, slimstem small reedgrass, small white lady's slipper, and yellow gentian (WDNR, 2007). Since the current status of these historic plant occurrences is unknown, a DNR review is needed to determine if the habitat still exists on site.

### **Cultural/Historical Resources**

There has been documentation that the Ho-Chunk, formerly the Winnebago Indians, predominated in southern Wisconsin, including the area of Fitchburg. They camped near water and hunted and fished for several months before moving to a new location. They traditionally located themselves along Lake Barney and on the mound above Nine Springs (Fitchburg Bicentennial Committee, 1976). Charles Brown, former Museum Director of the Wisconsin Historical Society, documented the locations of numerous Indian trails, camps, and mounds throughout the State. An atlas of known archaeological sites and trails was completed using his findings. One of the mapped Indian trails runs from north to south in the Northeast Neighborhood, and connects all the way down to Swan Pond (S. Fish Hatchery Road). The atlas also includes the locations of two camps and a mound group north of E. Clayton Road (Brown and Hixon & Co., 1924). It is unknown whether any remnants of the trail, camps, or mounds still remain. The existence of marker trees, trees bent by the Indians to guide trail users, may be the only evidence of the historic Indian trails.

The Park & Open Space Proposal also documents other historical features. These include historic buildings and sites, mines/quarries, territorial road, lead trails, and railroad corridors. Fitchburg still has most of its one room schoolhouses and it is host to five places on the National Register of Historic Places.

### Scenic Resource Inventory

Scenic resources have many benefits to a community. They stimulate higher property values and increased tourism revenue, add to sense of place, and improve the quality of life. The Parks, Recreation & Forestry Department has given the citizens of Fitchburg an opportunity to contribute to this Proposal through their participation in a scenic resource inventory. Citizens have been asked to take pictures of what they feel to be the most scenic locations within the City. Unfortunately, few citizens have participated. However, of those who did, the most scenic area appears to be the land west of Seminole Highway between Lacy Road and Grandview Road.

### Methodology

The boundaries of the proposed park and open space were drafted based on a composite of the aforementioned resources and the following criteria:

- Exclusion of
  - o Urban service area
  - Most private structures
- Inclusion of
  - o Hovel and Christoph's greenbelt (formerly Moraine Edge Park)
  - o Most water features, wetlands, and their 300-ft buffers
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  - o County, State, and Federal public lands
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### Recommendations

The Parks Commission has strongly endorsed the Proposal and its concept and goals and has contributed through their recommendation of three priorities:

- The greenbelt, deemed Moraine Edge Park & Preserve, running along the southern urban service area boundaries (While specific plans have not been established, this land has potential for a diverse array of recreational and educational opportunities.)
- The west and south expansion of McGaw Park (for additional active recreation facilities)
- The Northeast Neighborhood (furthest along in the development planning process)

### Methods for Preserving Parks and Open Space

Because of high land values, a number of preservation and acquisition strategies would need to be utilized to implement this proposal. Mechanisms and resources for acquisition could include donation, park dedication, conservation easements, purchase of title, or the purchase/transfer of development rights (lands remains private). There are state and county grants available to fund this type of a project.

Lands that are designated as wetlands or streams and their buffers will be protected through state regulation and Fitchburg's Comprehensive Plan. Typically, when areas are developed these lands are dedicated to the city, but not as park dedication.

Fitchburg has the potential to be a permanently green and sustainable community -- a model for other communities. We can achieve this by being proactive in protecting existing resources that our community values, therefore, enhancing the quality of life for generations to come

### How to Get Involved

Do your part to help plan Fitchburg's future parks and open spaces! The following are a couple current opportunities to participate:

### **Heritage Oak Inventory**

We have identified many of the trees in the original survey. However, the survey does not cover the entire area of Fitchburg and most trees in the survey area are on private property.

Please help us identify old oak trees that are estimated to be at least 200 years old. White or bur oaks need a trunk circumference measured at 4.5 feet above ground level of at least 10 feet, and pin, black, and red oaks need a trunk circumference of 11 feet. If you see a potential tree that is on private property, please do not trespass. Email the location and we will contact the landowner.

You can email Dana Dentice with new tree information at dana.dentice@city.fitchburg.wi.us.

### **Scenic Resource Inventory**

We are looking for the public to submit photographs of the places they find most aesthetically pleasing, areas that should be protected for their high scenic quality. These locations must be outside the urban service area to be considered for the Conceptual Park & Open Space Proposal. See the following website for further instruction:

http://www.city.fitchburg.wi.us/parks forestry/ParkOpenSpaceProposal.php

Please direct any questions to Dana Dentice at 270-4287 or dana.dentice@city.fitchburg.wi.us.

### **Project Updates and Other Info**

Refer to the following City webpage for updates and additional information regarding the Conceptual Park & Open Space Proposal. An electronic copy of this document can also be viewed there.

http://www.city.fitchburg.wi.us/parks forestry/ParkOpenSpaceProposal.php

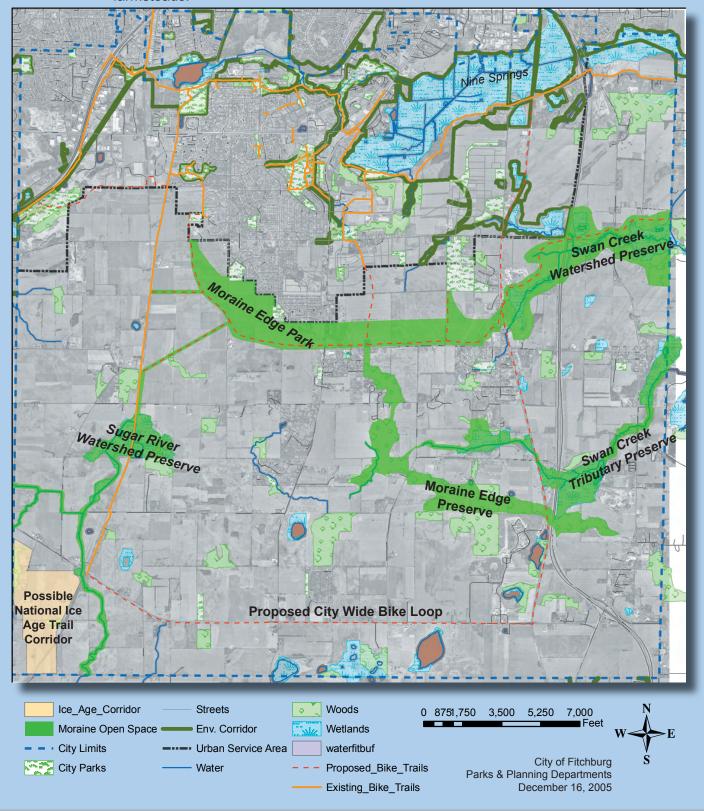
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## Fitchburg Moraine Open Space & Preservation Areas

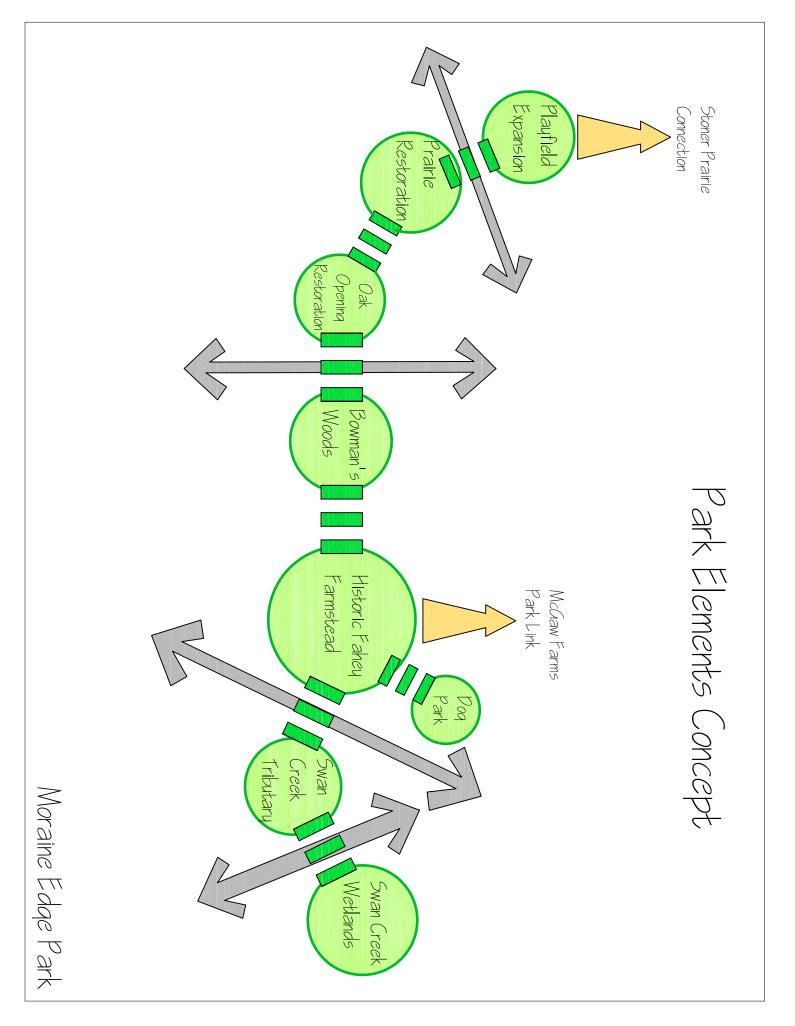
This open space system will allow Fitchburg to preserve significant geologic and natural features. It will also create and preserve wildlife corridors, protect groundwater recharge areas and high risk contamination areas, as well as protect important historical and cultures features of the city. Open space elements could include multi-use recreational areas, connected pedestrian and bike trails, prairie-oak restoration and historic farmsteads.



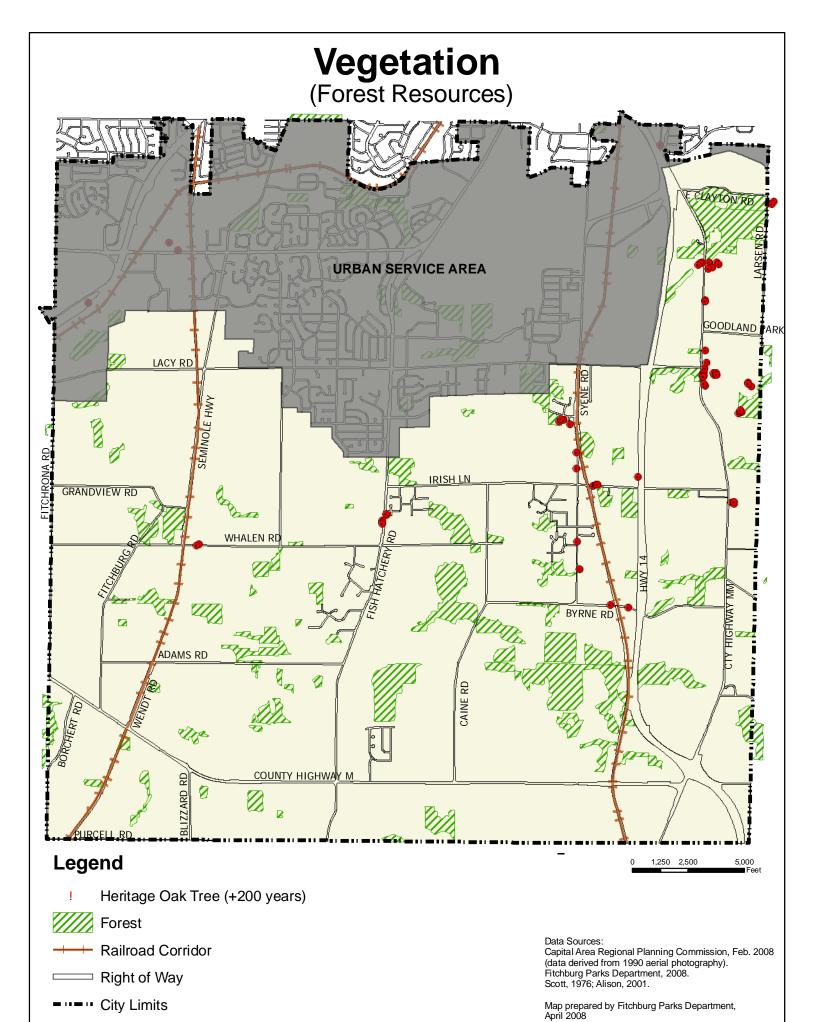
# Park Concept

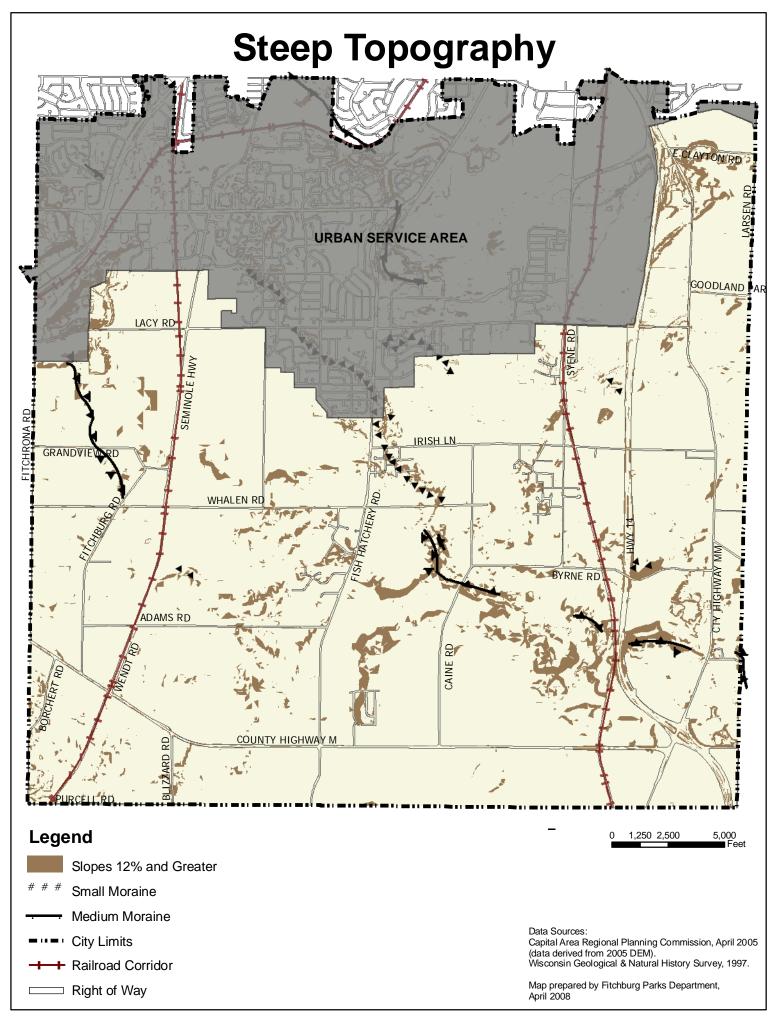
The Progression of Farming in Fitchburg

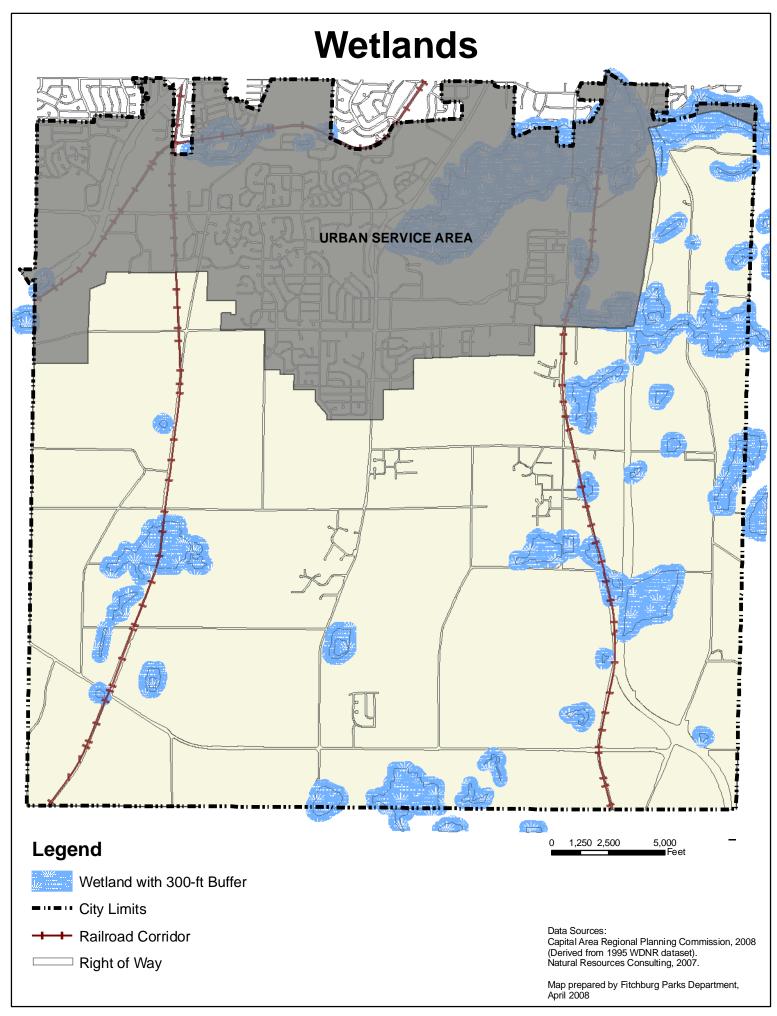
Stoner Prairie School -Site of Stoner Farm in Farming Past - Historic Homestead Working Farms Faney Present Day Timeline Future Bio Technology S Biotechnology) Campus 1 Village areen Tech

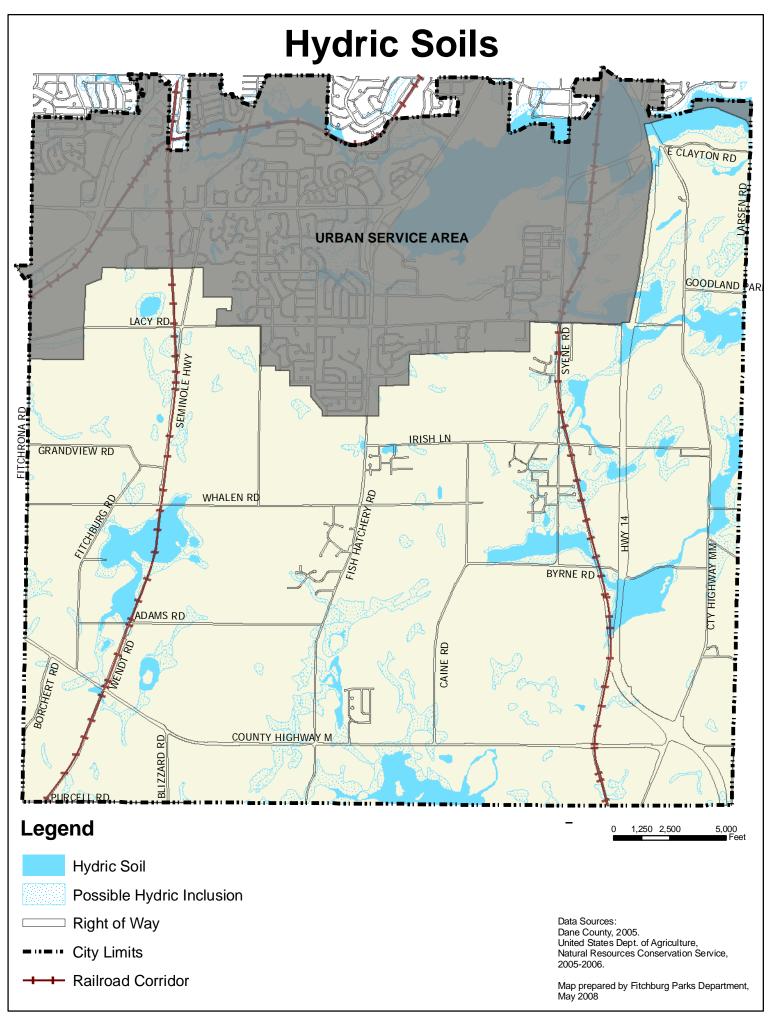


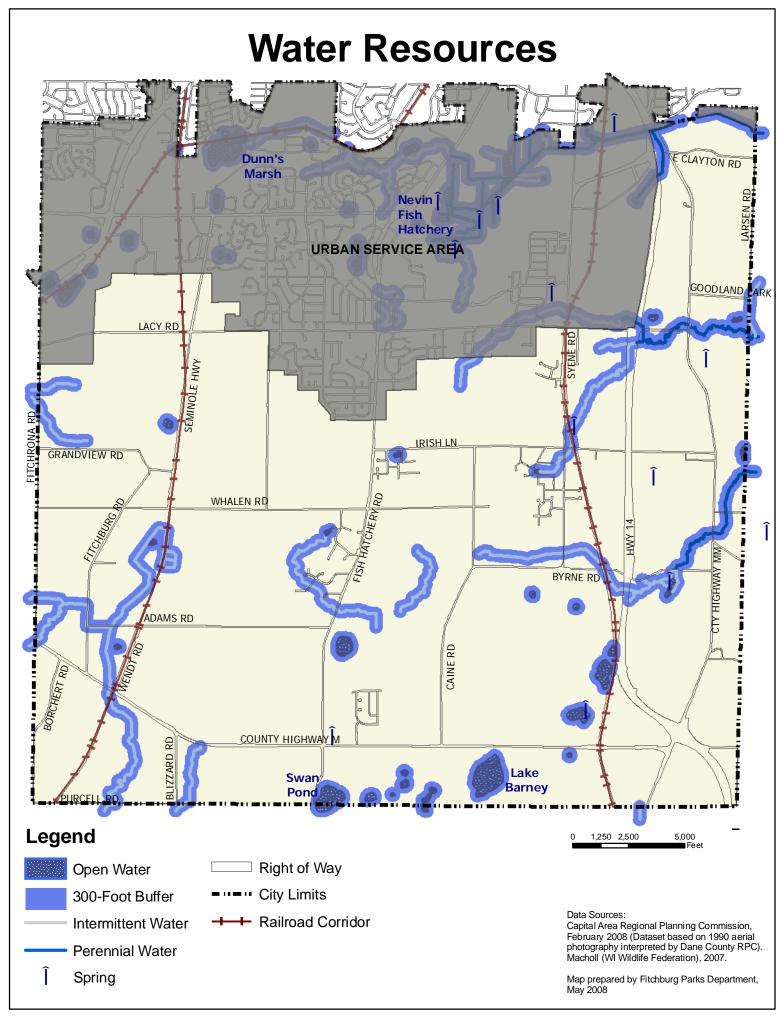
Page 14

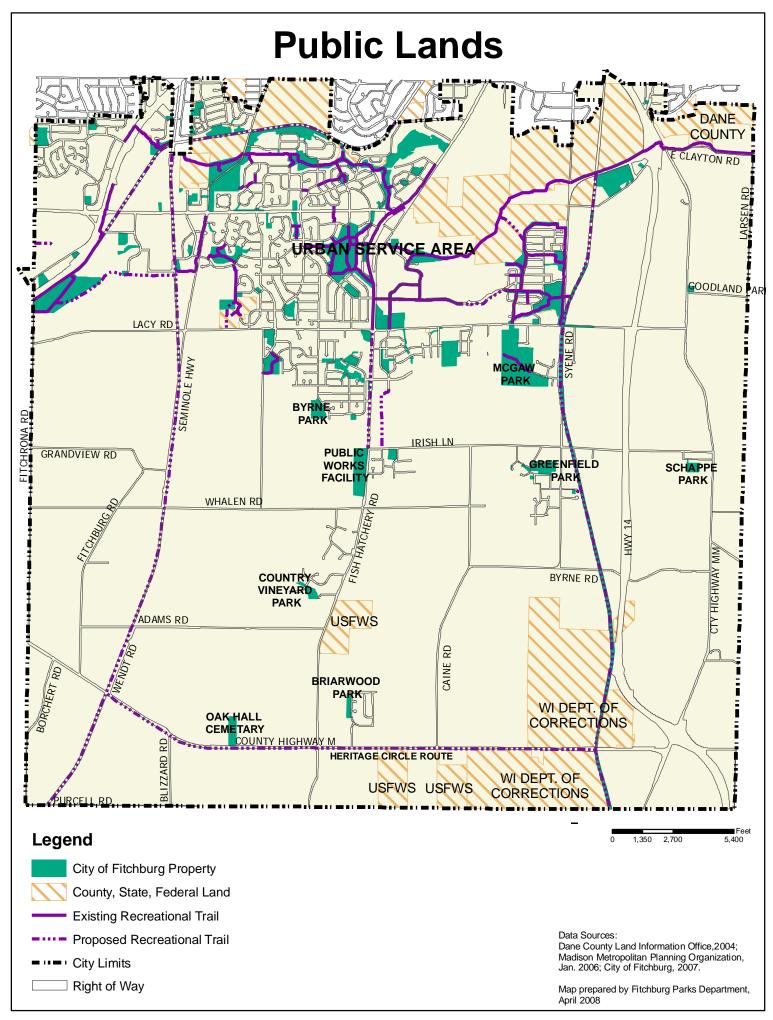


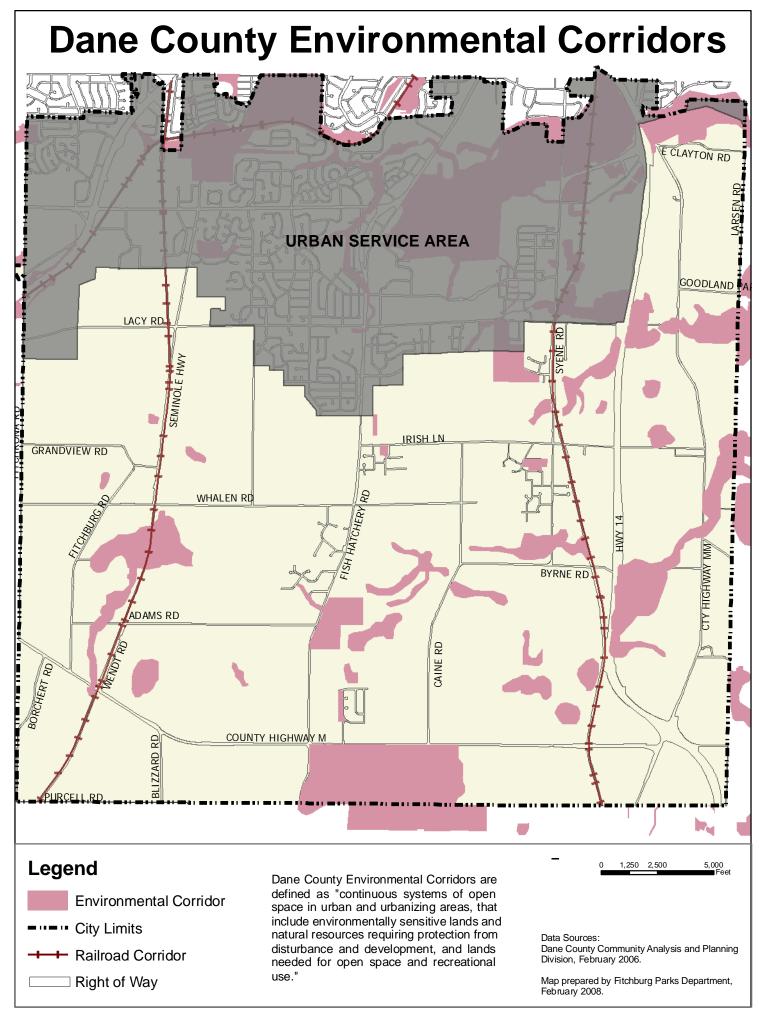


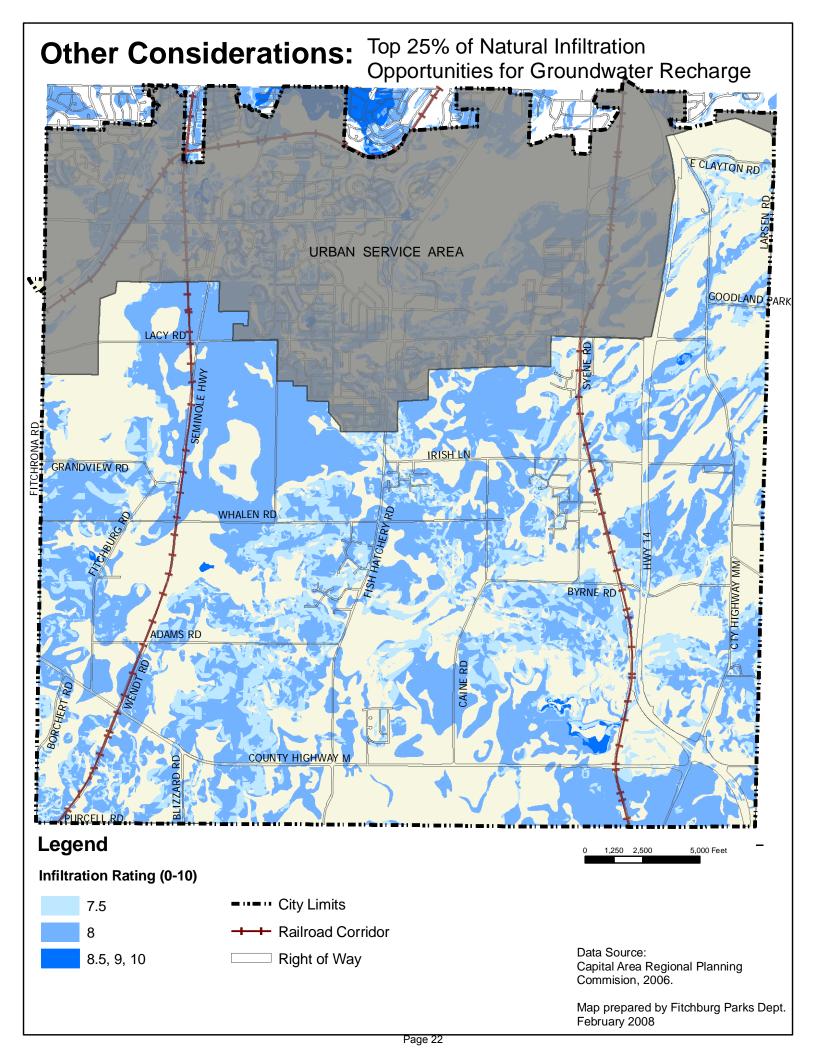


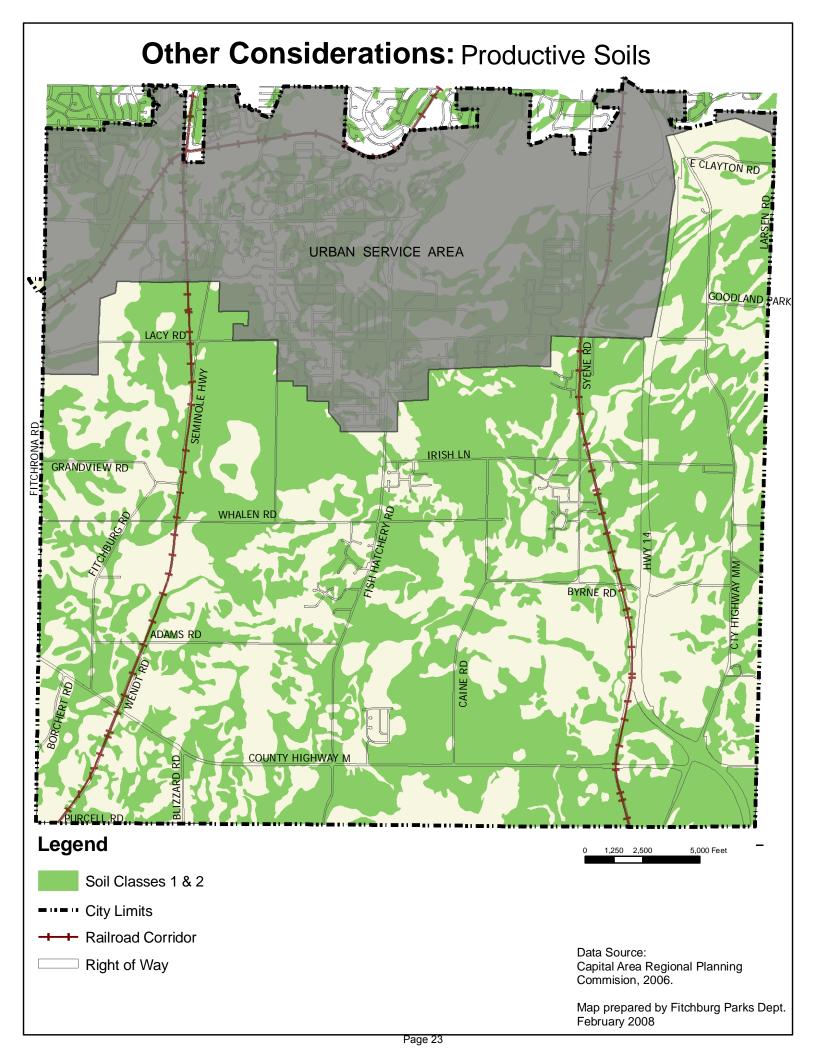


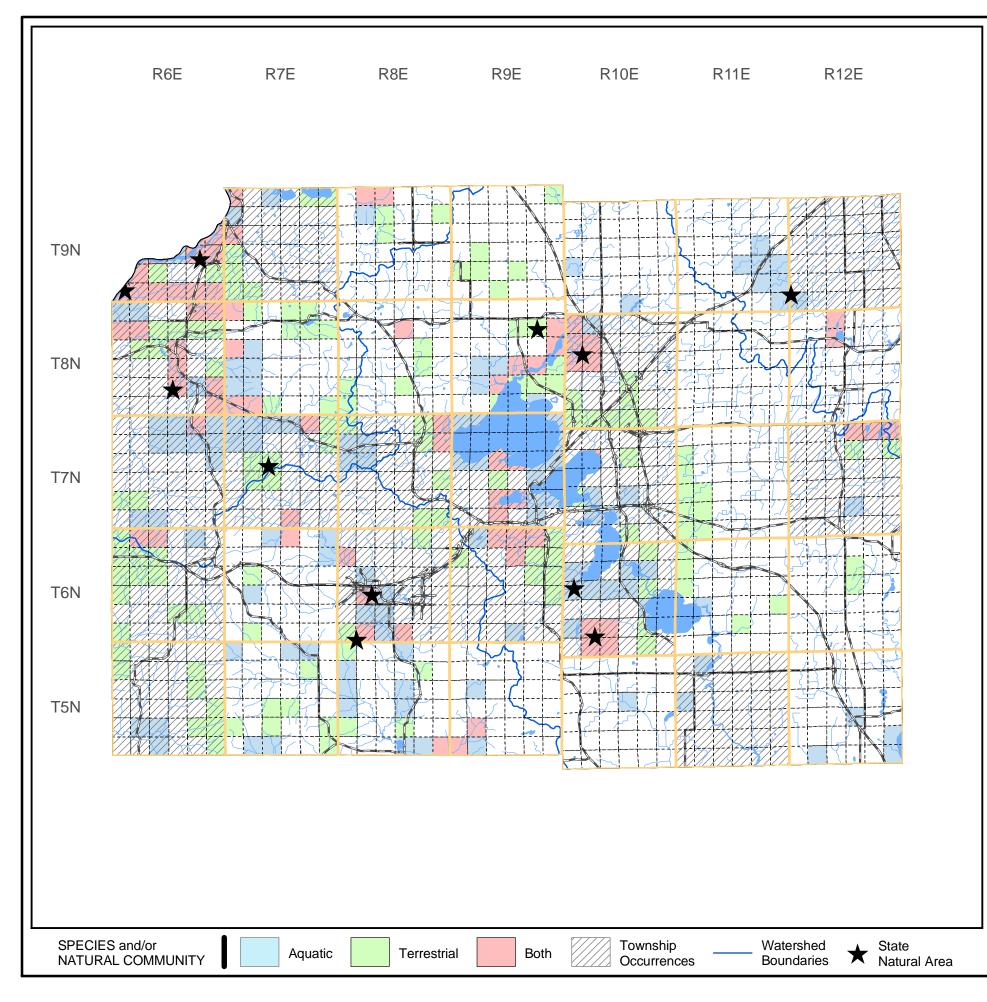












# **Dane County**

### AQUATIC OCCURRENCES

### Animal

Elktoe, Alasmidonta marginata, 1988 Osprey, Pandion haliaetus, 2005 Ellipse, Venustaconcha ellipsiformis, 1985 Buckhorn, Tritogonia verrucosa, 1997 Bullfrog, Rana catesbeiana, 2006 Bullhead, Plethobasus cyphyus, 1988 Butterfly Ellipsaria lineolata 1997 Monkeyface, Quadrula metanevra, 1988 Mussel Bed, Mussel Bed, 1988 Paddlefish, Polyodon spathula, 1992 Shoal Chub, Macrhybopsis aestivalis, 1994 Blue Sucker, Cycleptus elongatus, 1995 Silver Chub, Macrhybopsis storeriana, 1993 American Eel, Anguilla rostrata, 1979 Arctic Shrew, Sorex arcticus, 1962 Higgins' Eye, Lampsilis higginsii, 1988 Least Darter. Etheostoma microperca, 1972 Pirate Perch, Aphredoderus sayanus, 1993 Redside Dace, Clinostomus elongatus, 1979 Round Pigtoe, Pleurobema sintoxia, 1997 An Owlet Moth. Macrochilo bivittata. 2001 Cyrano Darner, Nasiaeschna pentacantha, 1964 Lake Sturgeon, Acipenser fulvescens, 1991 Mulberry Wing, Poanes massasoit, 2003 Redfin Shiner, Lythrurus umbratilis, 1928 Black Redhorse, Moxostoma duquesnei, 1928 Pugnose Minnow, Opsopoeodus emiliae, 1964 Pugnose Shiner, Notropis anogenus, 1900 Striped Shiner, Luxilus chrysocephalus, 1900 Lake Chubsucker, Erimyzon sucetta, 1968 Rock Pocketbook, Arcidens confragosus, 1997 Smoky Shadowfly, Neurocordulia molesta, 1993 Banded Killifish, Fundulus diaphanus, 1975 Great Spreadwing, Archilestes grandis, 1983 Blanding's Turtle, Emydoidea blandingii, 2004 Smokey Eyed Brown, Satyrodes eurydice fumosa, 2001 Starhead Topminnow, Fundulus dispar, 1992 Red-shouldered Hawk. Buteo lineatus. 1985 Silphium Borer Moth, Papaipema silphii, 1994 Western Sand Darter, Etheostoma clarum, 1994 Blanchard's Cricket Frog, Acris crepitans blanchardi, 1983 Black-crowned Night-heron, Nycticorax nycticorax, 1929 A Predaceous Diving Beetle, Lioporeus triangularis, 1985

### **Plants**

Sycamore, Platanus occidentalis, 1946 Cuckooflower, Cardamine pratensis, 1891 Glade Mallow, Napaea dioica, 1999 Pale Bulrush, Scirpus pallidus, 1916 Whip Nutrush. Scleria triglomerata, 200 Wild Licorice, Glycyrrhiza lepidota, 1977 Adder's-tongue, Ophioglossum pusillum, 2001 Aduel s-tongue, cypringuissami pusinum, 2001
Drooping Sedge, Carex prasina, 1993
Hall's Bulrush, Scirpus hallii, 1996
Swamp Agrimony, Agrimonia parviflora, 1990
Tufted Bulrush, Scirpus cespitosus, 1996
Sheathed Pondweed, Potamogeton vaginatus, 1947
Crossleaf Milkwort, Polygala cruciata, 1858
Small Forget-me-not, Myosotis laxa, 1936
Smooth-sheath Sedge, Carex Jeavikaginata, 1989 Smooth-sheath Sedge, Carex laevivaginata, 1989 Engelmann Spike-rush, Eleocharis engelmannii, 1996 Showy Lady's-slipper, Cypripedium reginae, 2005 Sticky False-asphodel, Tofieldia glutinosa, 1858 Common Bog Arrow-grass, Triglochin maritima, 1891 Lesser Fringed Gentian, Gentianopsis procera, 1990 Slim-stem Small-reedgrass, Calamagrostis stricta, 1947 Hidden-fruited Bladderwort, Utricularia geminiscapa, 1966 Small White Lady's-slipper, Cypripedium candidum, 2001 Prairie White-fringed Orchid, Platanthera leucophaea, 1999 Sweet-scented Indian-plantain, Cacalia suaveolens, 2001 Northern Yellow Lady's-slipper, Cypripedium parviflorum var. makasin, 2001

### **Natural Communities**

Open Bog, Open bog, 1967 Bog Relict, Bog relict, 1987 Shrub-carr, Shrub-carr, 1984 Wet Prairie, Wet prairie, 1981 Alder Thicket, Alder thicket, 1969 Forested Seep. Forested seep. 2001 Calcareous Fen, Calcareous fen, 2001 Emergent Marsh, Emergent marsh, 2001 Ephemeral Pond, Ephemeral pond, 1978 Floodplain Forest, Floodplain forest, 2001 Wet-mesic Prairie, Wet-mesic prairie, 1985 Northern Wet Forest, Northern wet forest, 2002 Southern Sedge Meadow, Southern sedge meadow, 2001 Stream-Fast, Hard, Warm, Stream-fast, hard, warm, 1973 Stream-Slow, Hard, Cold, Stream-slow, hard, cold, 1969 Stream-Slow, Hard, Warm, Stream-slow, hard, warm, 1974 Lake--Shallow, Hard, Seepage, Lake--shallow, hard, seepage, 1977 Lake--Shallow, Hard, Drainage, Lake--shallow, hard, drainage, 1985 Springs and Spring Runs, Hard, Springs and spring runs, hard, 1985

### TERRESTRIAL OCCURRENCES

### Animal

Barn Owl, Tyto alba, 1994 Bullsnake, Pituophis catenifer, 2004 Dickcissel, Spiza americana, 2003 Pygmy Shrew, Sorex hoyi, 1961 A Leafhopper, Prairiana cinerea, 1996 A Leafhopper, Prairiana angustens, 1996 A Leafhopper, Laevicephalus vannus, 1999 A Leafhopper, Amplicephalus kansiensis, 1997
Bell's Vireo, Vireo bellii, 2006
Prairie Vole, Microtus ochrogaster, 1970 Ottoe Skipper, Hesperia ottoe, 1992 Woodland Vole, Microtus pinetorum, 1944 Bat Hibernaculum, Bat Hibernaculum, 1973 Cerulean Warbler, Dendroica cerulea, 2003 Regal Fritillary, Speyeria idalia, 2004 Upland Sandpiper, Bartramia longicauda, 2004 Henslow's Sparrow, Ammodramus henslowii, 2004 Herp Hibernaculum, Herp Hibernaculum, 1998 Loggerhead Shrike, Lanius Iudovicianus, 1982 Ornate Box Turtle, Terrapene ornata, 1995 Acadian Flycatcher, Empidonax virescens, 2006 Juniper Hairstreak, Callophrys gryneus, 1988 Pithona Tiger Moth, Grammia oithona, 1996 Prairie Leafhopper, Polyamia dilata, 1998 Timber Rattlesnake, Crotalus horridus, 1991 Phyllira Tiger Moth, Grammia phyllira, 1996 Broad-winged Skipper, Poanes viator, 1991 Yellow-billed Cuckoo, Coccyzus americanus, 2005 Yellow-breasted Chat, Icteria virens, 1997 Western Harvest Mouse, Reithrodontomys megalotis, 1968 Short-winged Grasshopper, Dichromorpha viridis, 1998 Abbreviated Underwing Moth, Catocala whitneyi, 1992
Abbreviated Underwing Moth, Catocala abbreviatella, 1992
Franklin's Ground Squirrel, Spermophilus franklinii, 1944 Western Slender Glass Lizard, Ophisaurus attenuatus, 1986 Red-tailed Prairie Leafhopper, Aflexia rubranura, 2005

### **Plants**

Twinleaf, Jeffersonia diphylla, 2006 Innocence, Houstonia caerulea, 1993 Marbleseed, Onosmodium molle, 1995 Kitten Tails, Besseya bullii, 1998 Snowy Campion, Silene nivea, 1880 Wild Hyacinth, Camassia scilloides, 2003 Cluster Fescue, Festuca paradoxa, 1947 Hill's Thistle, Cirsium hillii, 2002 Prairie Turnip. Pediomelum esculentum. 1999 Yellow Gentian, Gentiana alba, 1999 Flodman Thistle, Cirsium flodmanii, 1949 Prairie Parsley. Polytaenia nuttallii. 1991 Purple Milkweed, Asclepias purpurascens, 1973 Fulpie Milkweed, Asclepias lanuginosa, 1948 Woolly Milkweed, Asclepias lanuginosa, 1948 Broad Beech Fern, Phegopteris hexagonoptera, 1901 Earleaf Foxglove, Tomanthera auriculata, 1860 Prairie Milkweed, Asclepias sullivantii, 1858 Richardson Sedge, Carex richardsonii, 1953 American Gromwell, Lithospermum latifolium, 2000 Autumn Coral-root, Corallorhiza odontorhiza, 1991 Pale Green Orchid, Platanthera flava var. herbiola, 1998 Reflexed Trillium, Trillium recurvatum, 2000 Shadowy Goldenrod, Solidago sciaphila, 1992 American Fever-few, Parthenium integrifolium, Hairy Wild-petunia, Ruellia humilis, 2001 Roundstem Foxglove, Agalinis gattingeri, 1999 Short's Rock-cress, Arabis shortii, 1992 Wilcox Panic Grass, Panicum wilcoxianum, 1958 Yellow Wild-indigo, Baptisia tinctoria, 1986 Pale False Foxglove, Agalinis skinneriana, Prairie Bush-clover, Lespedeza leptostachya, 2006 Prairie Fame-flower, Talinum rugospermum, 1993 Yellow Giant Hyssop, Agastache nepetoides, 1999 Heart-leaved Skullcap, Scutellaria ovata, 2001 Purple Meadow-parsnip, Thaspium trifoliatum var. flavum, 1963 Large Roundleaf Orchid, Platanthera orbiculata, 1993 One-flowered Broomrape, Orobanche uniflora, 1996 Pale-purple Coneflower, Echinacea pallida, 2002 Rough Rattlesnake-root, Prenanthes aspera, 2001 Prairie False-dandelion, Nothocalais cuspidata, 2003 Prairie Indian Plantain, Cacalia tuberosa, 2000
Purple-stem Cliff-brake, Pellaea atropurpurea, 1967
Nodding Rattlesnake-root, Prenanthes crepidinea, 2001

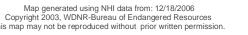
### **Natural Communities**

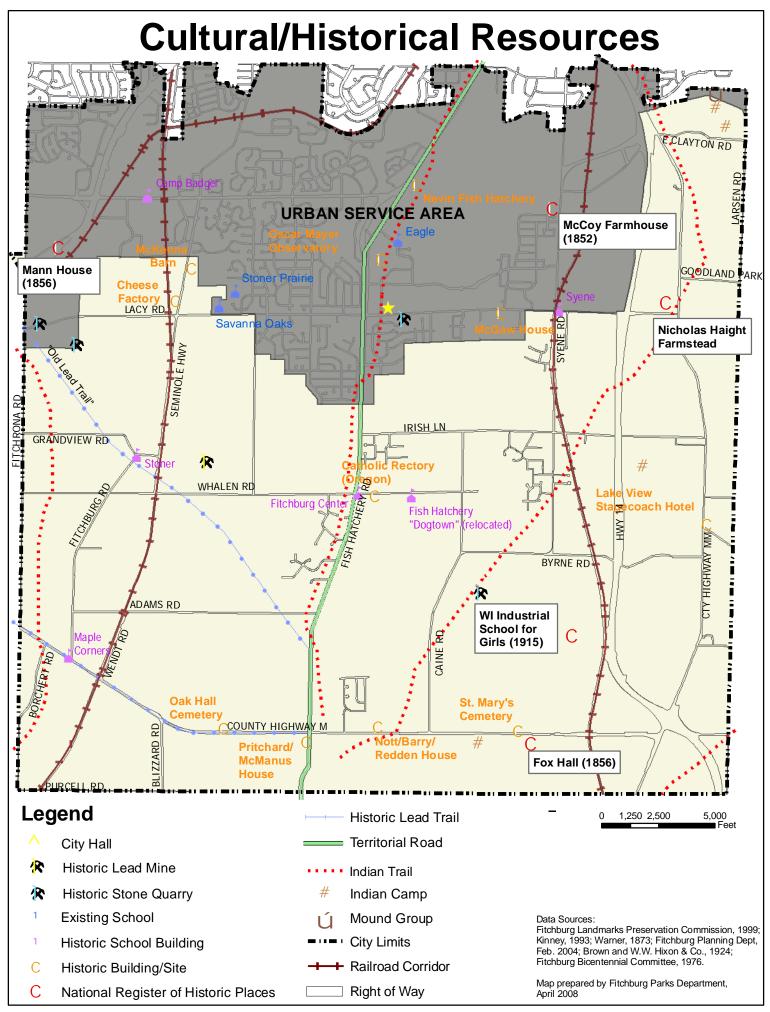
Dry Cliff Dry cliff 1978 Cedar Glade, Cedar glade, 1978 Dry Prairie, Dry prairie, 1997 Oak Barrens. Oak barrens. 1988 Oak Opening, Oak opening, 1988 Oak Woodland, Oak woodland, 1993 Mesic Prairie, Mesic prairie, 1995 Dry-mesic Prairie, Dry-mesic prairie, 2001 Southern Dry Forest, Southern dry forest, 1989 Southern Mesic Forest, Southern mesic forest, 1987 Southern Dry-mesic Forest. Southern dry-mesic forest. 1985.

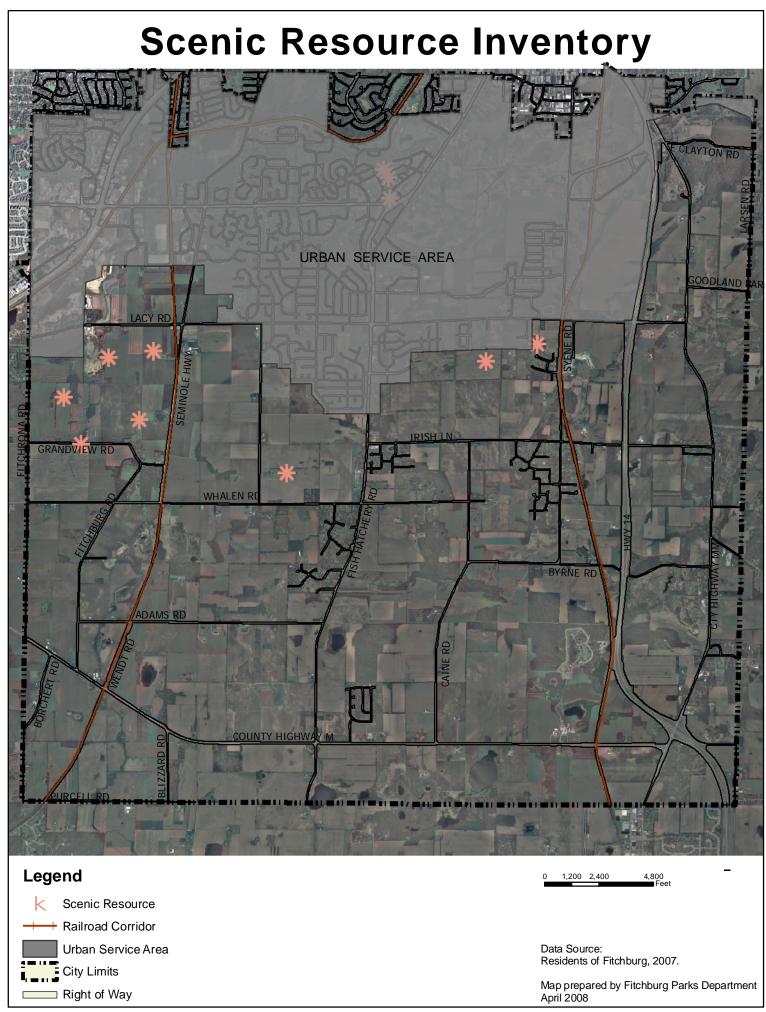
> ENDANGERED RESOURCES

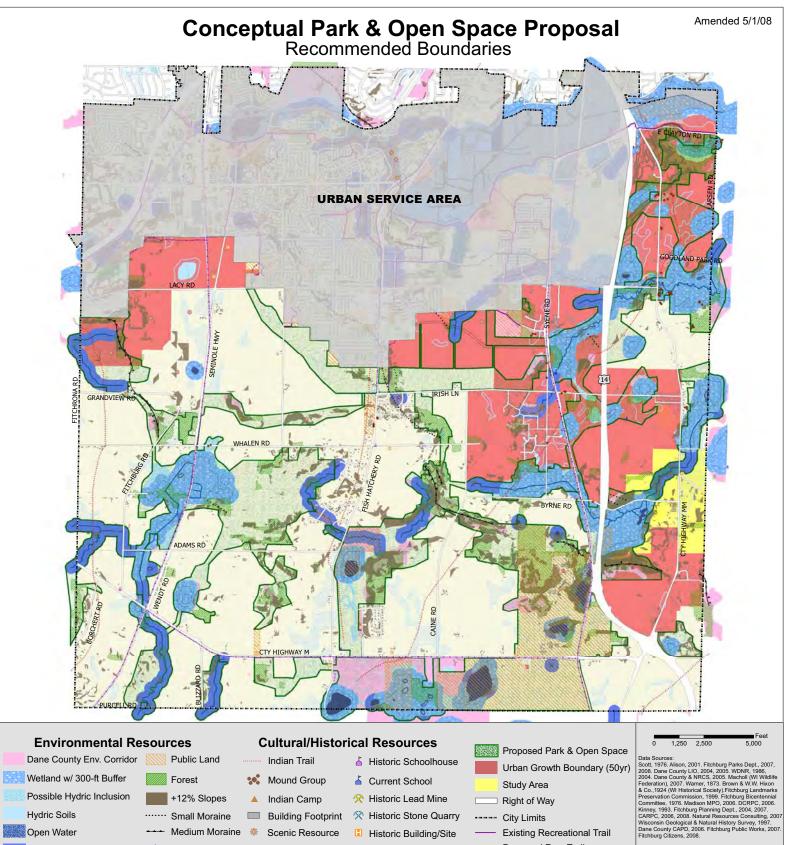


This map represents the known occurrences of rare species and natural communities that have been recorded in the Wisconsin Natural Heritage Inventory (NHI). Colored sections indicate the presence of one or more occurrences within that section. Hatched townships indicate one or more occurrences reported only at the township level. The date following the names above notes the most recent year the occurrence was recorded in the county.









National Register

of Historic Places

300-ft Water Buffer

Streams/Water

Spring

Heritage Oak Tree

Fitchburg Parks, Recreation
& Forestry Department
May 2008

Proposed Rec. Trail

Proposed Road

